



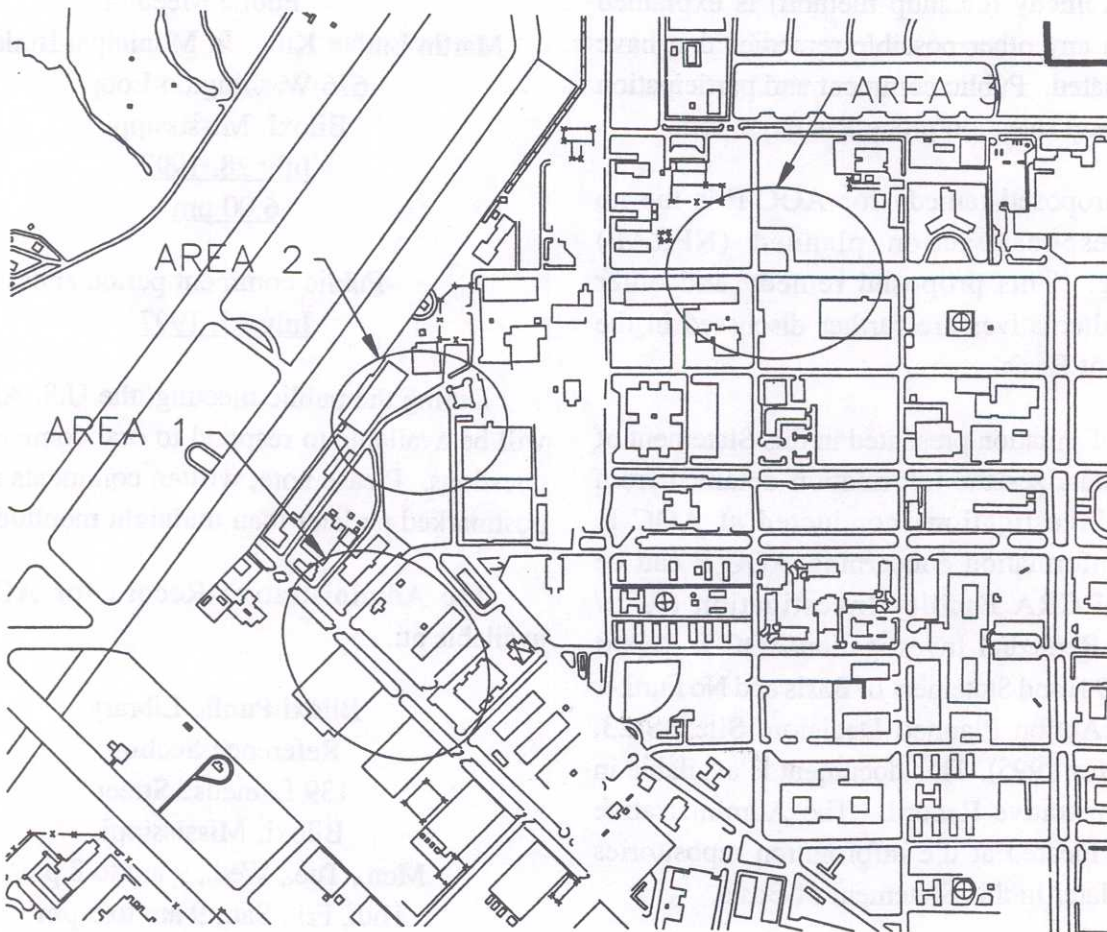
KEESLER AIR FORCE BASE INSTALLATION RESTORATION PROGRAM KEESLER AFB, MISSISSIPPI

Statement of Basis - Area of Concern F - Sanitary Sewer System

IRP SITE DESIGNATION

Sanitary Sewer System: IRP Site Code SS-23. RCRA Site Code AOC F

AOC F SITE LOCATION MAP



INTRODUCTION

Keesler AFB is located within the city limits of Biloxi, Mississippi, on the peninsula surrounded by the Back Bay of Biloxi and the Mississippi Sound. The Sanitary Sewer System at Keesler AFB

transports wastewater from residential areas, office buildings, training facilities, industrial areas, and operations buildings to a point where it leaves Keesler AFB and flows into the City of Biloxi wastewater treatment plant. In November 1988, the system was identified in the Hazardous and Solid

Wastes Amendments (HSWA) permit as Area of Concern (AOC) F. The sanitary sewer was identified as an AOC because of the potential that industrial wastes may have been discharged into the sewer from industrial operations that included maintenance, fabrication, and repair of components and parts of aircraft and ground equipment. Types of wastes generated by these operations may have included metals, acids, cyanides, cleaning agents, volatile organic compounds, (VOCs), and petroleum, oils, and lubricants (POL).

This paper, called a Statement of Basis, is part of the cleanup planning process and is a requirement of the RCRA permit issued by USEPA. The proposed remedy (cleanup method) is explained along with any other possible remedies that have been evaluated. Public comment and participation in the remedy selection process is requested.

The proposed remedy for AOC F is the no further response action planned (NFRAP) alternative. This proposed remedy and other remedial alternatives are further discussed in the Statement of Basis.

The information presented in this Statement of Basis summarizes the information obtained from previous investigations conducted at AOC F. Detailed information concerning AOC F can be found in RCRA Facility Investigation (RFI)/CERCLA Remedial Investigation/AOC F Report (March 1994) and Statement of Basis and No Further Response Action Planned Decision, Site SS-23, AOC F (May 1995). This document is available in the Administrative Record. The Administrative Record is located at the information repositories identified later in this Statement of Basis.

The public is encouraged to comment and participate in the remedy selection. The public is also encouraged to review the Administrative Record. The U.S. Environmental Protection Agency (USEPA) will select a final remedy for AOC F only after the public comment period has ended, and the comments received are reviewed and considered.

PUBLIC COMMENT PERIOD AND PUBLIC MEETING

The public is encouraged to provide comments regarding the corrective action alternatives provided in the RFI/CERCLA Remedial Investigation/AOC F Report (March 1994) and this Statement of Basis. The public is also invited to provide comments on corrective action alternatives not presented in the above mentioned documents.

Important dates to remember

Public comment period begins:

May 26, 1997

Public Meeting:

Martin Luther King, Jr. Municipal Building
676 Washington Loop
Biloxi, Mississippi

July 28, 1997

6:00 pm

Public comment period ends:

July 25, 1997

During the public meeting, the U.S. Air Force will be available to respond to oral comments and questions. Please note, written comments must be postmarked no later than midnight month/day/year

The Administrative Record for AOC F is available at:

Biloxi Public Library
Reference Section
139 Lameuse Street
Biloxi, Mississippi
Mon., Tue., Wed., 9 am to 8 pm
Thu., Fri., Sat., 9 am to 5 pm

Comments received will be summarized and responses will be provided in the upcoming Responses to Comments document. The Responses to Comments document will be prepared following the close of the public comment period. The comments and corresponding responses, and the

Responses to Comments will be included with the final permit modification in the Administrative Record.

To request further information please contact:

John Chiaramonte Jr.
Keesler AFB, Mississippi
(601) 377-5803

or

Mr. Robert Pope
U.S. Environmental Protection Agency,
Region IV
(404) 562-8506

or

Mr. Bob Merrill
Mississippi Department of Environmental Quality
(601) 961-5049

Submit written comments to:

U.S. Environmental Protection Agency
Attention: Mr. Robert Pope
US. Environmental Protection Agency, Region IV
Federal Facilities Branch
61 Forsyth Street
Atlanta, GA 30303

Comments must be postmarked no later than midnight, July 25, 1997.

PROPOSED REMEDY

USEPA is proposing the No Further Response Action Planned remedy to address AOC F, the Sanitary Sewer System. No costs are associated with the NFRAP remedy.

AOC F DESCRIPTION

The Sanitary Sewer System at Keesler AFB transports wastewater from residential areas, office buildings, training facilities, industrial areas, and operational buildings to a point where it leaves

Keesler AFB and flows to the City of Biloxi wastewater treatment plant. Prior to the 1970s, wastewater from the sanitary sewer was treated at an onsite wastewater treatment plant located near the western boundary of the base; the treated effluent was discharged into the Back Bay through a 30-inch diameter sewer effluent line. The system consists of clay, concrete, and polyvinyl chloride (PVC) pipes ranging in diameter from 8 to 30 inches. It is a shallow system and in some locations is only two feet below the ground surface. The Sanitary Sewer System was designed to carry domestic wastes. However, the system was identified in the 18 November 1988 HSWA Permit because of the potential that industrial wastes may have been discharged into the sewer from industrial operations that included maintenance, fabrication, and repair of components and parts of aircraft and ground equipment. Types of wastes generated by these operations may have included metals, acids, cyanides, cleaning agents, volatile organic compounds (VOCs), and petroleum, oils, and lubricants (POL).

AOC F Investigations and History

In 1991, a video survey of the sanitary sewer system was performed to evaluate the condition of the system. Approximately 30,000 linear feet of the line was surveyed. The video was used to identify areas of damage (i.e., holes in the bottom of the pipe, pipe collapse, broken or missing seals, offset joints, and pipe blockage) that could have been potential zones for chemical leakage to the surrounding soil and groundwater. Three areas were identified downstream of the industrial shops (potential sources of disposed industrial wastes) which showed significant damage to the sewer line. These areas were considered zones of high potential for chemical release.

In 1993, a RCRA Facility Investigation (RFI) was conducted along the sanitary sewer line at the three areas of interest. A total of 26 soil and 7 groundwater samples were collected upgradient and downgradient of the line. The samples were analyzed for volatile organic compounds, metals,

cyanide, and petroleum hydrocarbons. The soil and groundwater sample results were compared to screening criteria to determine if there was a risk to human health and the environment. No exceedances of the screening criteria were found for any organic compound evaluated. Minor exceedances of inorganic compounds occurred, but were determined to be the result of natural variations in the distribution of elements in the soils.

AOC F Investigation Results

The results of the RFI concluded that there no additional work was required along the sanitary sewer system. An RFI report was submitted in March 1994 to the EPA for approval. Based on EPA's approval, a Decision Document was prepared for AOC F which recommended no further action. The Decision Document was submitted to the EPA in May 1995.

SUMMARY OF AOC F RISKS

Soil and groundwater analytical results from the RFI Investigation were compared with screening criteria including maximum background concentrations (for metals in soils), Carcinogenic and Non-carcinogenic Preliminary Remediation Goals (PRGs), Federal Drinking Water Standards, and Mississippi Groundwater Quality Standards. PRGs are concentration goals or action levels for chemicals in specific media, calculated using published carcinogenic and non-carcinogenic toxicity values under specific exposure conditions. Actual media concentrations are compared to the calculated PRGs to identify constituents which may need to be evaluated further. As discussed in the RFI Report for AOC F, the PRGs were calculated based on a residential exposure scenario, using a target excess individual lifetime risk of 10^{-6} for carcinogens, and a target hazard index of 1 for non-carcinogens.

No exceedances of the screening criteria were found for any organic compound evaluated. Minor exceedances of inorganic compounds occurred, but were determined to be the result of natural variations

in the distribution of elements in the soils. The site is eligible for unrestricted construction activities presenting no threat to human health or the environment during the scheduled excavation and replacement of the damaged portions of the Sanitary Sewer System.

The potential for release of airborne contaminants during excavation and replacement of the damaged portions of the Sanitary Sewer System was also of concern. However, because no groundwater or soil contamination was indicated, these activities would not present a threat to worker health or the environment.

Discharges from facilities located along the Back Bay as well as from the sanitary sewer may have impacted the Back Bay's water and sediment quality in the past. The magnitude of any impact on endangered species using the Back Bay resources is unknown, and depends on the nature of the individual discharges and the distance of chemical migration. Analyses of the discharge from the pre-1970 sanitary sewer system and from upstream sources are not available, thus past effects on wildlife in the area can not be evaluated.

CORRECTIVE ACTION SCOPE

The Corrective Action proposed in this Statement of Basis is intended to be the only corrective action taken at AOC F. This action poses no threat to human health or the environment based on current site conditions at AOC F.

CURRENT ACTIVITIES AT AOC F

A Decision Document recommending no further action at AOC F was prepared in May 1995 and submitted to the EPA. This document can be found in the Administrative Record. The remaining activities for AOC F are to modify Keesler AFB's RCRA permit to reflect its NFRAP status.

CORRECTIVE ACTION **ALTERNATIVES SUMMARY**

There is no substantial threat or potential for release which could adversely impact human health or the environment. Therefore, no rationale can be identified for further action at AOC F. Lacking evidence of a substantial threat due to hazardous chemicals potentially released or migrating from AOC F, the only alternative control measure identified for evaluation was no further action.